

REMARKS

Claims 1-184 are pending. Claims 1, 52, 107, 131, 153, 166, and 170 are amended to incorporate language from paragraph 13 on page 5. Claims 1, 16, 17, 19, 21, 52, 55, 70, 71, 73, 75, and 119 are amended stylistically to ensure proper antecedent basis. Claim 8, 58, 115, and 139 are amended to remove certain agents and to amend two typographical errors. Claims 6-9, 14, 24-31, 43-45, 47-51, 56-59, 64, 66-69, 76, 77, 80-87, and 102-184 are withdrawn.

Claims 1, 2, 15, 22, 23, 32-42, and 46 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Lee, *et al.* (Biotechnol. And Bioeng., 2001, 73, 135-145) (“the Lee article”). Claim 1 is amended to recite “where said emissive agent emits light in the 600-1100 nm spectral regime.” No such teaching or suggestion is found in the Lee article. Withdrawal of the rejection is respectfully requested.

Claims 1-4, 15, 22, 23, 32-42, 46, 52-55, 65, 74, 78, 79, and 88-101 were rejected under 35 U.S.C. § 103(a) as allegedly obvious in view of U.S. Patent 6,123,923 (“the Unger patent”) in view of the Lee article. Claims 1 and 52 are amended to recite “where said emissive agent emits light in the 600-1100 nm spectral regime.” No such teaching is found in the Unger patent. As such, Applicants submit the rejection should not be reapplied.

Claims 1-4, 15, 22, 23, 32-42, and 46 were rejected as allegedly obvious over U.S. Patent No. 6,159,445 (“the Klaveness patent”) in view of the Lee article. Claim 1 is amended to recite “where said emissive agent emits light in the 600-1100 nm spectral regime.” No such teaching or suggestion is found in the Klaveness patent nor the Lee article. Thus, even if one were to combine the cited art, no instant invention could be arrived at. Withdrawal of the rejection is respectfully requested.

Claims 1-5, 10-13, 15-23, 32-42, 46, 52-55, 60-63, 65, 70-75, 78, 79, and 88-101 were rejected as allegedly obvious over the Klaveness patent and the Unger patent in view of the Lee article and further in view of Lin, *et al.* (Chem. Eur. J., 1995, 1, 645-651) (“the Lin article”). Amended claim 1 is directed to a polymersome comprising two elements (1) a membrane comprising amphiphilic copolymer and (2) certain emissive agent(s). As admitted by the Office, the Klaveness patent and the Unger patent each fail to teach or suggest amphiphilic copolymers (Office Action at page 9). The Klaveness patent and the

Unger patent each fail to teach or suggest the emissive agent of the amended claims. Thus, all elements of the invention would have to be imported from other references. The Office seeks to provide the missing information by importing the teachings of two additional references—the Lee article for the amphiphilic copolymer and the Lu article for porphyrin moieties. The extent of the reconstruction necessary to allegedly arrive at any instant claim, however, too extensive to be consistent with obviousness.

According to MPEP § 4142.02, “[i]n determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. Even if it would have been obvious to make each of the individual changes made to derive the instant claims from the Klaveness and Unger patents (a point not conceded by the Applicants), there is no motivation to make the combination of changes needed—especially when one considers the extensive make over of the disclosures of the Klaveness and Unger patents needed.

Further, it is well-established law that rejections based on 35 U.S.C. §103 must rest on a factual basis, and these facts must be interpreted without hindsight reconstruction of the invention from the prior art. *In re Warner*, 154 USPQ 173, 178 (CCPA 1967). 35 U.S.C. § 103 requires a specific suggestion or motivation suggested in the prior art to modify the reference or to combine reference teachings. MPEP § 2143. Based on the extensive changes to the disclosures of the Klaveness and Unger patents, it seems that the instant invention can only be derived at through the use of impermissible hindsight.

For each of the foregoing reasons, the rejection should be withdrawn.

Furthermore, not only do the contrast agents recited in the Lee article, the Unger patent, and the Klaveness patent not emit light in the 600-1100 nm range, they would be inferior at the enduses claimed in the instant application. At the lower wavelengths of the agents of the cited art, the agents are useful for imaging the vesicle structure but, due to scattering considerations, would not be good at the *in vivo* detection of the delivery of pharmaceutical agents and the like to a site within a patient. This advantage of the instant agents is not obvious in view of the cited art. For at least this reason, the instant claims are not obvious in view of the cited art.

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PATENT

Upon allowance of the non-withdrawn claims, Applicants ask that the full scope of the elected invention be examined. Additionally, upon allowance of the product claims, Applicants request rejoinder of the process claims in accordance with the provisions of MPEP § 821.04. The withdrawn process claims are amended herein to conform to the scope of the pending product claims.

The foregoing is believed to constitute a complete and full response to the Office Action of record. Accordingly, an early and favorable reconsideration of the rejections and an allowance of all of pending claims is earnestly solicited. Should the Examiner determine that any further action is necessary to place the Application I condition for allowance, the Examiner is encouraged to contact the undersigned by telephone.

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Respectfully submitted,

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